

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A radar device mounted on a moving object moving along a continuous plane comprising:

a transceiver unit which transmits a signal having a main lobe in a direction of movement of said moving object and a side lobe directed toward said continuous plane and for receiving a first reflection signal from a target in a direction of said main lobe and a second reflection signal from said continuous plane in a direction of said side lobe; and

control processing means which detects a frequency of a beat signal of said second reflection signal received by said transceiver unit and a signal emitted by said transceiver unit and for detecting information correlated to the a relative attitude of said radar device for said continuous plane based on said frequency.

Claim 2. (Original) A radar device mounted on a moving object moving along a continuous plane comprising:

a transceiver unit which transmits a signal having a main lobe in a direction of movement of said moving object and a side lobe directed toward said continuous plane and for receiving a first reflection signal from a target in a direction of said main lobe and a second reflection signal from said continuous plane in a direction of said side lobe; and

control processing means which detects a frequency of a beat signal of said second reflection signal received by said transceiver unit and a signal

emitted by said transceiver unit and detects changes in an attitude of said radar device for said continuous plane based on said frequency.

Claim 3. (Original) A radar device according to either of claims 1 or 2,

wherein said control processing means detects a surface condition of said continuous plane based on the strength of a beat signal of said second reflection signal received by said transceiver unit and the signal emitted by said transceiver unit.

Claim 4. (Currently Amended) The radar device of claim 1, further
~~A radar system mounted on a moving object moving along a continuous plane,~~
comprising:

~~said radar device of claim 1; and~~

output means which outputs a result detected by said control processing means as information showing an attitude of said radar for said moving object.

Claim 5. (Currently Amended) The radar device of claim 2, further
~~A radar system mounted on a moving object moving along a continuous plane~~
comprising:

~~said radar device of claim 2; and~~

output means which notifies a change in an attitude of said radar device for said moving object when said control processing means detects a change in mounting attitude of said radar device for said continuous plane.

Claim 6. (Currently Amended) The radar device of claim 3, further
~~A radar system mounted on a moving object moving along a continuous plane~~
comprising:

~~said radar device of claim 3; and~~

output means which outputs a notification of a surface condition of
said continuous plane detected by said control processing means.